

Claims

1. A production method of polyolefin foamed sheet, comprising the steps of:

5 bringing a polyolefin foamable raw sheet into contact with a close-contact medium;

heating the foamable raw sheet at a temperature not lower than a temperature permitting thermocompression-bonding to the close-contact medium and lower than a foam initiating temperature to

10 thermocompression-bond the sheet to the close-contact medium; and

subsequently, heating to foam at least one of the surfaces of the foamable raw sheet at a temperature not lower than the foam initiating temperature while compression-bonding the foamable raw sheet to the close-contact medium, thereby obtaining the foamed sheet.

15 2. The production method of polyolefin foamed sheet according to claim 1, wherein a device having an endless belt wound and rotated around a plurality of rollers including heating first and second rollers is used,

20 wherein the foamable raw sheet is brought into contact with the first roller through the endless belt and the foamable raw sheet is heated thereon at the temperature not lower than a temperature permitting thermocompression-bonding to the endless belt and lower than a foam initiating temperature to thermocompression-bond the sheet to the endless belt, and

25 wherein the foamable raw sheet is brought into contact with the second roller through the endless belt and the foamable raw sheet is heated and foamed thereon at a temperature not lower than the foam initiating temperature to obtain the foamed sheet.

30 3. The production method of polyolefin foamed sheet according to claim 1, wherein, after the polyolefin foamable raw sheet is heated from a first surface of the foamable raw sheet while a heated surface is in close contact with the close-contact medium, the foamable raw sheet is heated from a second surface thereof to be foamed in heating and foaming the

35 4. The production method of polyolefin foamed sheet according to

Sub B1

21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50

claim 1, wherein, when the foamable raw sheet is heated and foamed, the foamable raw sheet is simultaneously heated to be foamed from both surfaces of the foamable raw sheet while a heated surface of the polyolefin foamable raw sheet is in close contact with the close-contact medium.

5. The production method of polyolefin foamed sheet according to any one of claims 1 to 4, wherein the thermocompression-bonding of the foamable raw sheet to the close-contact medium is guided by a nip roller, and

10 wherein the surface temperature of the nip roller is controlled to be lower than the temperature of the close-contact medium.

6. A production device of polyolefin foamed sheet, comprising a first endless belt and a second endless belt respectively wound and rotated around a plurality of rollers including heating first and second rollers,

wherein the first endless belt is disposed so that a first surface of the foamable raw sheet is in close contact therewith, and

wherein the second endless belt is disposed so that a second surface of the foamable raw sheet is in close contact therewith.

7. A production device of polyolefin foamed sheet, comprising first endless belt and second endless belt respectively wound and rotated around a plurality of rollers including a heating roller, a polyolefin foamable raw sheet being in close contact with the endless belts, wherein the first and the second endless belt sandwich the foamable raw sheet from both surfaces to be simultaneously in close contact with upper and lower surfaces of the foamable raw sheet, and

wherein a heater for heating the foamable raw sheet sandwiched by both of the endless belts is provided.

8. A production device of polyolefin foamed sheet, comprising a first roller and a second roller having a first and second heating section on the circumference thereof with which a polyolefin foamable raw sheet is in close contact,

wherein the first roller is disposed so that a first surface of the foamable raw sheet is in close contact therewith, and

wherein the second roller is disposed so that a second surface of the

foamable raw sheet is in close contact therewith.

500
B1

2011 01 11 10:00 AM